Table 1. BC+OM Emissions Summary

Sector	Subsector	Mass Emissions					CO_{2e}	
		BC	POA	BC	POA	BC + OM	Low	High
		Short Tons		Metric Tons			Metric Tons	
Electric Generating Units (EGUs)	Coal	193	250	175	227	402	173,041	365,545
	Oil	1.1	0.34	1.0	0.30	1.3	994	2,101
	Gas[a]	0	86	0	78	156	0	0
Non-EGU Fuel Combustion	Coal	5.7	7.5	5.2	6.8	12	5,161	10,902
(Residential,Commercial, and Industrial)	Oil	22	9.5	20	8.6	29	19,692	41,599
	Gas	0.03	219	0.03	199	199	0	0
	Other[b]	170	884	155	803	957	1,985	4,194
Onroad Gasoline (Exhaust, Brake Wear, & Tire Wear)		192	670	174	608	782	82,973[c]	175,278[c]
Onroad Diesel (Exhaust, Brake Wear, & Tire Wear)		119	142	108	129	237	104,966	221,738
Aircraft[d]		50	25	45	23	68	44,592	94,200
Other Energy Use	Nonroad Gasoline	52	509	47	462	509	0	0
	Nonroad Diesel	557	169	505	153	659	500,018	1,056,274
	Nonroad Other[e]	338	106	307	96	403	303,511	641,160
	Other Combustion[f]	8.7	72	7.9	65	73	237	500
Industrial Processes[g]		42	606	38	550	588	326	690
Agriculture[h]		27	1,362	25	1,236	1,261	0	0
Waste Management	Landfills	0.12	7.3	0.11	6.6	7	0	0
	Incineration[i]	5.3	9.8	4.8	8.9	14	4,741	10,015
	Open Burning[j]	986	1,830	895	1,661	2,557	885,686	1,870,987
Wildfires/Prescribed Burns[k]		8,400	71,501	7,626	64,909	72,534	0	0
Miscellaneous[l]		94	1,446	85	1,312	1,398	86	182
	Totals	**11,262**	**79,909**	**10,224**	**72,541**	**82,765**	**2,128,011**	**4,495,364**

Table 1. BC+OM Emissions Summary

NOTE: CO_2e is zeroed out for sources with OM:BC ratio >4.0 (see text).

[a] The SPECIATE3.2 PM profile showed zero for PEC (BC). A review of other in-house data showed that BC is present in PM emissions from natural gas combustion at a OM:BC ratio of around 1:1. This ratio was used to calculate BC+OM and the associated CO_{2e} emissions.

[b] Most of these emissions are from residential wood combustion.

[c] The CO_2e estimates are associated with tire wear only, since the exhaust and brake wear components have OM:BC ratios >4:1.

[d] Note for aircraft, criteria pollutant emissions are only estimated for the boundary (mixing) layer (i.e., mainly landing and take-off cycle emissions). Therefore, these estimates do not include emissions occurring above the mixing layer but within AZ airspace.

[e] Nearly all emissions are from the railroad source categories.

[f] About 60% of emissions are from vehicle fires. Other contributors include structure fires and aircraft/rocket engine firing and testing.

[g] In this summary, construction is included in the Industrial Processes sector. Construction source categories (industrial/commercial/institutional, residential, road, and other) are the major contributors (96%) of the Industrial Processes emissions.

[h] The Agriculture sector includes food industries. 80% of the BC emissions come from agricultural tilling. Agricultural tilling and commercial cooking each contribute about 43% of the POA emissions.

[i] About 97% of BC and POA emissions come from commercial/institutional incineration.

[j] Open burning of land clearing debris contributes about 68% of BC/POA emissions. Other contributors include open burning of yard waste and household waste.

[k] Wildfire/Prescribed burn emissions were excluded from the CO_2e estimates due to the much higher OM to BC ratio (about 7:1).

[l] Paved and unpaved road dust are significant contributors to the EC and OC emissions.